

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the instant application:

1. (Currently Amended) A method of diagnosing voices comprising:
processing a received voice signal associated with a speaker's voice using an auditory model;
identifying one or more attributes of said speaker's voice by analyzing said processed voice signal;
comparing said identified attributes in said ~~processed voice signal~~ speaker's voice with one or more baseline ~~voice~~ vocal quality attributes derived from at least one baseline voice signal, said derived attributes associated with at least one baseline measure of ~~voice~~ vocal quality of a human speaker; and
based upon said comparing step, determining at least one objective measure of ~~voice~~ vocal quality of said speaker's voice, said at least one objective measure defining a degree of ~~voice~~ vocal quality of said speaker's voice relative to said at least one baseline measure of ~~voice~~ vocal quality of a human speaker.
2. (Cancelled).
3. (Currently Amended) The method of claim 1, wherein said at least one measure of ~~voice~~ vocal quality is at least one of roughness and hoarseness.
4. (Currently Amended) The method of claim 3, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include changes in pitch over time and changes in loudness over time in said processed voice signal.

5. (Currently Amended) The method of claim 4, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of partial loudness in said processed voice signal.

6. (Currently Amended) The method of claim 1, wherein said at least one measure of ~~voice~~ vocal quality is breathiness.

7. (Currently Amended) The method of claim 6, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of low frequency periodic energy in said processed voice signal.

8. (Currently Amended) The method of claim 6, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of high frequency aperiodic energy in said processed voice signal.

9. (Currently Amended) The method of claim 6, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of partial loudness of a periodic signal portion of the processed voice signal.

10. (Currently Amended) The method of claim 6, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of noise in the processed voice signal and a measure of partial loudness of the processed voice signal.

11. (Currently Amended) A system for diagnosing voices comprising:

means for processing a received voice signal associated with a speaker's voice using an auditory model;

means for identifying one or more attributes of said speaker's voice by analyzing said processed voice signal;

means for comparing said identified attributes in said ~~processed voice signal~~ speaker's voice with one or more baseline ~~voice~~ vocal quality attributes in at least one baseline voice signal, said baseline ~~voice~~ vocal quality attributes associated with at least one baseline measure of ~~voice~~ vocal quality of a human speaker; and

means for determining at least one objective measure of ~~voice~~ vocal quality of said speaker's voice based upon said comparison, said at least one objective measure defining a degree of ~~voice~~ vocal quality of said speaker's voice relative to said at least one baseline measure of ~~voice~~ vocal quality of a human speaker.

12. (Cancelled).

13. (Currently Amended) The system of claim 11, wherein said at least one measure of ~~voice~~ vocal quality is at least one of roughness and hoarseness.

14. (Currently Amended) The system of claim 13, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include changes in pitch over time and changes in loudness over time in said processed voice signal.

15. (Currently Amended) The system of claim 14, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of partial loudness in said processed voice signal.

16. (Currently Amended) The system of claim 11, wherein said at least one measure of ~~voice~~ vocal quality is breathiness.

17. (Currently Amended) The system of claim 16, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include a measure of low frequency periodic energy in said processed voice signal.

18. (Currently Amended) The system of claim 16, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include a measure of high frequency aperiodic energy in said processed voice signal.

19. (Currently Amended) The system of claim 16, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include a measure of partial loudness of a periodic signal portion of the processed voice signal.

20. (Currently Amended) The system of claim 16, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include a measure of noise in the processed voice signal and a measure of partial loudness of the processed voice signal.

21. (Currently Amended) A ~~machine~~ computer-readable storage, having stored thereon a computer program having a plurality of code sections executable by a ~~machine~~ computer for causing the ~~machine~~ computer to perform the steps of:

processing a received voice signal associated with a speaker's voice using an auditory model;

identifying one or more attributes of said speaker's voice by analyzing said processed voice signal;

comparing said identified attributes in said ~~processed voice signal~~ speaker's voice with one or more baseline ~~voice~~ vocal quality attributes derived from at least one baseline ~~voice~~ vocal signal, said derived attributes associated with at least one baseline measure of ~~voice~~ vocal quality of a human speaker; and

based upon said comparing step, determining at least one objective measure of ~~voice~~ vocal quality of said speaker's voice, said at least one objective measure defining a degree of ~~voice~~ vocal quality of said speaker's voice relative to said at least one baseline measure of ~~voice~~ vocal quality of a human speaker.

22. (Cancelled).

23. (Currently Amended) The ~~machine~~ computer-readable storage of claim 21, wherein said at least one measure of ~~voice~~ vocal quality is at least one of roughness and hoarseness.

24. (Currently Amended) The ~~machine~~ computer-readable storage of claim 23, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include changes in pitch over time and changes in loudness over time in said processed voice signal.

25. (Currently Amended) The ~~machine~~ computer-readable storage of claim 24, wherein the identified attributes of the ~~processed voice signal~~ said speaker's voice include a measure of partial loudness in said processed voice signal.

26. (Currently Amended) The ~~machine~~ computer-readable storage of claim 21, wherein said at least one measure of ~~voice~~ vocal quality is breathiness.

27. (Currently Amended) The machine computer-readable storage of claim 26, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of low frequency periodic energy in said processed voice signal.

28. (Currently Amended) The machine computer-readable storage of claim 26, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of high frequency aperiodic energy in said processed voice signal.

29. (Currently Amended) The machine computer-readable storage of claim 26, wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of partial loudness of a periodic signal portion of the processed voice signal.

30. (Currently Amended) The machine computer-readable storage of claim 26, ~~The method of claim 6,~~ wherein the identified attributes of ~~the processed voice signal~~ said speaker's voice include a measure of noise in the processed voice signal and a measure of partial loudness of the processed voice signal.